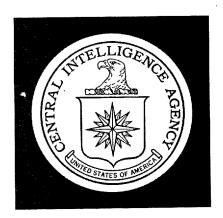
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DIRECTORATE OF INTELLIGENCE

Intelligence Memorandum

Communist Supply Losses in South Vietnam

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INTELLIGENCE MEMORANDUM

Communist Supply Losses in South Vietnam*

Summary

Material losses suffered by Communist forces in South Vietnam during the first six months of 1968 have been at levels much lower than in 1967 but only because of a very sharp decline in losses of foodstuffs. Losses of weapons and ammunition, however, are far in excess of 1967 levels. major share of supply losses occurred in the I Corps and III Corps areas, which account for about 85 percent of total enemy losses. Despite the mounting losses of essential combat equipment, there is little evidence that these losses have significantly degraded the enemy's combat effectiveness or have created insurmountable logistics problems. The increasing destruction or capture of enemy combat supplies, however, has undoubtedly contributed to the disruption of many planned military operations.

The following are the major developments in the destruction or capture of enemy supplies in the first half of 1968:

1. Known enemy losses of weapons and ammunition during the first six months of 1968 totaled 920 tons, about 35 percent greater than in all of 1967.

Note: This memorandum was produced solely by CIA. It was prepared by the Office of Economic Research and was coordinated with the Office of Current Intelligence and the Director's Special Assistant for Vietnamese Affairs.

^{*} Excluding losses from air attack and losses in Laos. The combination of these losses, if known, might add significantly to total Communist supply losses.

- 2. Weapons losses on a monthly average increased from about 20 tons in 1967 to 72 tons in 1968, an increase of almost 270 percent.
- 3. Ammunition losses on a monthly average increased from 38 tons in 1967 to 82 tons in 1968, an increase of more than 115 percent.
- 4. Foodstuffs losses, however, have declined sharply, from almost 14,000 tons in 1967 to about 2,900 tons during the first half of 1968.

The heavy losses of ammunition and weapons have not resulted in any apparent reduction of the overall combat effectiveness of the Viet Cong and North Vietnamese forces. There is no doubt that enemy forces in South Vietnam -- main, local, and guerrillas -- are better equipped and supplied than ever before. The destroyed enemy materiel represents only a small fraction of the estimated volume of supplies moving through Laos alone and available to the Communist forces in South Vietnam. Replacement of supply losses, including foodstuffs, would require about seven trucks a day, or less than 10 percent of the tonnage delivered to southern Laos during the first half of 1968.

There have been an increasing number of reports of logistical shortages among Viet Cong and North Vietnamese forces this year, but these shortages appear to be localized and are more related to forward distribution problems rather than to any overall weakness in the enemy's logistical system. In the III Corps area, which is dependent on a much more tenuous logistical pipeline, it is probable that the timely destruction of enemy military supplies has been an important factor in pre-empting or preventing sustained attacks upon Saigon or other targets in the III Corps area.

The increased destruction of enemy supplies of weapons and ammunition in 1968 results, in large measure, from the increased intensity of the ground war in South Vietnam. Battalion-size attacks by Viet Cong and North Vietnamese units during the first six months of 1968 have already exceeded the total number of attacks initiated in 1967. There is a close parallel between enemy losses of weapons and ammunition by Corps area and enemy troops killed in action by Corps

area, suggesting the more enemy dead, the higher the intensity of combat, the higher the level of logistical support, and the higher the enemy's losses of weapons and ammunition. More and better intelligence available to the Allies has also contributed to the increased discovery of enemy arms caches, particularly in the I and III Corps areas. Another factor in the rise in captured Communist weapons has been the decline in enemy battlefield discipline. North Vietnamese troops taken in battle frequently tend to be younger, less motivated, and more poorly trained than in years past.

The increased number of US spoiling actions has undoubtedly also contributed to the higher volume of enemy supply losses. At the same time, a close look at the data suggests that the increase in enemy supply losses is also related to the increased combat initiative and aggressiveness of the enemy forces. The Communists are losing proportionately more offensive weapons this year than last. The enemy lost more than double the number of crew-served weapons, primarily offensive weapons, in the first six months of 1968 than were lost in all of 1967. Losses of mortar rounds in 1968 have already exceeded the number of those losses reported in 1967. The sharp drop-off in the enemy's losses of foodstuffs may be the result of the Allies not invading Viet Cong base areas, where rice is kept in large quantities, as frequently this year as last.

Materiel Losses

- 1. The total volume of enemy supplies destroyed or captured in South Vietnam during 1968 has been running at monthly levels far below those attained during 1967. There have been dramatic changes, however, in the types of supplies being destroyed or captured. Enemy losses of foodstuffs during the first six months of 1968 totaled only 2,900 tons, compared with losses of almost 14,000 tons during 1967. Enemy losses of weapons and ammunition for January-June 1968 totaled 920 tons, 34 percent greater than similar losses in all of 1967.
- 2. A comparison of monthly tonnage losses of weapons and ammunition in 1967 and 1968 highlights the heavy enemy losses of this year. Average monthly weapons losses were almost four times greater in the first six months of 1968 than in 1967. Ammunition losses increased 116 percent, from 38 tons per month in 1967 to 82 tons a month in 1968. The monthly averages of known Communist losses of materiel in South Vietnam resulting from Allied ground operations* since 1967 are given in the following tabulation:

	Shor	ct Tons	
	1967	1968 <u>a</u> /	Percentage Change 1968 over 1967
Weapons Ammunition Foodstuffs	19.50 38.10 b/ 1,161.75	71.53 / 82.37 <u>b</u> / 478.50	+ 267 + 116 - 59
Total	1,219.35	632.40	- 48

a. Through June 1968.

b. Including small arms; crew-served ammunition, grenades, and mines; and an allowance for packaging.

^{*} Excluding losses from air attack and losses in Laos. The combination of these losses, if known, might add significantly to total Communist supply losses.

3. In quantitative terms, the number of weapons lost during the first six months of 1968 has already exceeded the number lost by the Communists in 1967 as shown in the following tabulation:

	1967	January-June 1968
Crew-served weapons	2,933	6,659
Individual weapons	28,614	31,171

- 4. Enemy losses of ammunition have paralleled the increase in Viet Cong and North Vietnamese weapons losses. During 1967, Communist losses of small arms ammunition totaled 2.3 million rounds; losses through June 1968 totaled 1.9 million rounds, an increase of 68 percent over a comparable period of 1967. Enemy losses of mortar rounds have also increased significantly in 1968; by the end of June they totaled almost 24,000 rounds, exceeding in the first six months of 1968 comparable losses for all of 1967. The higher losses of mortar ammunition are probably in part a reflection of the increased use of mortars by the Communists in South Vietnam.
- The sharp decline in enemy losses of foodstuffs in 1968 -- from 1,160 tons a month in 1967 to about 480 tons a month this year -- shows the continuation of a downward trend that started as early as In 1966, enemy losses of foodstuffs had totaled about 19,500 tons, declining to about 14,000 tons in 1967. The reason for the decline in captured foodstuffs is not entirely clear, but it may be the result of the Allies not invading Viet Cong base areas. where rice is kept in large quantities, as frequently this year as last. The decline may also have resulted from the Communists being forced to disperse their stockpiles of food to a greater extent than previously to avoid the heavy losses sustained in 1966 and 1967. Enemy losses of weapons, ammunition, and foodstuffs during 1967 and the first six months of 1968 are summarized in Table 1.

Losses by Corps Areas

6. Materiel losses were unevenly distributed by Corps areas. Losses in the I and III Corps areas accounted for 83 percent of total Communist supply

losses in South Vietnam (see Table 2). The heavy loss of supplies in these areas reflects the higher levels of combat which have been taking place in these two Corps areas. In the first six months of 1968, the I Corps area alone accounted for 44 percent of total enemy losses of weapons, compared with 35 percent in 1967. About 62 percent of enemy ammunition losses this year occurred in the I Corps area, compared with only 40 percent in 1967.

7. Enemy losses of weapons and ammunition increased in all four Corps areas in 1968, with the largest increase occurring in the I and III Corps areas. The monthly average of weapons losses in 1968 in the I Corps area has totaled about 32 tons, almost five times the monthly average in 1967. In the III Corps area the monthly average for 1968 has been about 23 tons, compared with 5 tons for 1967. Communist ammunition losses in the I Corps area have increased tremendously in 1968, averaging about 31 tons a month this year, compared with six tons a month during 1967. Average monthly losses of weapons and ammunition for 1967 and 1968, by Corps area, are given in the following tabulations:

		1967	January-June 1968		
	Short Tons	Percent of Total	Short Tons	Percent of Total	
Average monthly weapons losses					
I Corps II Corps III Corps IV Corps	6.90 4.80 5.40 2.40	35 25 28 12	31.65 8.76 23.19 7.93	44 12 33 11	
Total	19.50	100	71.53	100	

		1967	January-June 1968		
	Short Tons	Percent of Total	Short Tons	Percent of Total	
Average monthly ammunition losses					
I Corps II Corps III Corps IV Corps	6.00 2.10 5.40 1.50	40 14 36 10	31.12 4.80 12.12 2.26	62 10 24 4	
Total	15.00	<u>a</u> / 100	50.30	<u>a</u> / 100	

a. Totals differ from those in the tabulation in paragraph 2 because they exclude losses of grenades and mines, which are not available by Corps area. Losses also exclude packaging. The percentage distribution of ammunition losses, by Corps area, would probably not be changed significantly if the additional data on grenades and mines were available.

8. Enemy food losses during January-June 1968 also have been heaviest in the I and III Corps areas, as shown in the following tabulation:

							S	hort Tons
Corps Area	Jan	Feb	Mar	Apr	May	Jun	Total	Percent of Total
I II IV	152 101 377 3	92 93 245 4	160 27 153 4	148 124 171 35	282 35 99 1	360 23 146 6	1,194 403 1,191 53	42 14 42 2
Total	633	434	344	478	417	535	2,841	100

9. Data on enemy weapons losses in 1968, by Corps area, closely parallel those reported for enemy killed in action, by Corps area, as shown in the following tabulation:

Corps Area	Percent Killed in Action	Percent Weapons Losses	Percent Ammunition Losses
I III IV	44 13 30 13	44 12 33 11	62 10 24 4
Total	100.0	100.0	100.0

The close correspondence of data on enemy killed in action and weapons losses by Corps area suggests that enemy losses of weapons are closely related to the intensity of combat operations in the various Corps areas. The overall quality of the North Vietnamese fighting man in the I Corps area has declined somewhat, with the result that the enemy tends to abandon his weapon on the battlefield more frequently than in the past. However, relatively more ammunition has been lost by the Communists in the I Corps area than personnel casualties or weapons losses. This suggests that in order to maintain a large force level in the I Corps area and a higher level of combat, the enemy has had to establish larger-than-usual stockpiles of ammunition in areas where they are subject to increasingly successful detection and destruction by Allied forces.

Logistic Impact of Materiel Losses

10. Total enemy losses of supplies in South Vietnam account for about 24 percent of their estimated daily external requirements for supplies in 1968. Enemy losses of foodstuffs are equivalent to 26 percent of external food requirements; losses of Class II and IV supplies, mainly weapons, account for 29 percent of the enemy's external requirements for these supplies; and ammunition losses are equivalent to about 13 percent of the enemy's external requirements for Class V supplies, as shown in the following tabulation:

\$	Short Tons pe			
Class of Supply	Daily External Requirements	Daily Losses 1968	Daily Losses as Percent of Requirements	
Class I (food) Class II and IV (clothing and	60.00	15.60	26	
equipment) a/	11.80	3.38	29	
Class III (POL)	Negl.	Negl.	Negl.	
Class V (ammunition)	20.60	2.75	13	
Total	92.40	21.73	24	

a. Largely weapons losses.

A comparison of enemy losses and requirements by Corps area suggests that the logistic impact may be relatively severe in some areas. Losses of foodstuffs in the III Corps area, for example, account for more than 38 percent of the daily external logistic requirement. The data suggest that the enemy may also be suffering significant losses of Class II and IV supplies (weapons) in the I and III Corps areas. However, the enemy's losses of ammunition as a share of his requirements in both of these Corps areas -- 16 percent in the I Corps area and 14 percent in the III Corps area -- have not been exceptionally high. Enemy forces in the I Corps area are much closer to the supply bases in North Vietnam and are therefore in a much better position to replenish weapons and ammunition supplies than are the forces in the III Corps area. Conversely, units in the III Corps area can replace lost stocks of food more easily than can enemy forces located in some of the rice-deficit sectors of the I Corps area but have greater difficulty in replacing weapons and ammunition losses. The capture of large quantities of weapons and ammunition in the III Corps area, particularly around Saigon, has undoubtedly aggravated Viet Cong and North Vietnamese problems of ammunition resupply and internal distribution and has made it difficult for Communist forces to maintain continuous pressure against Saigon and other installations in the III Corps area. Enemy losses as a percent of requirements, by class of supply and Corps area, are shown in the following tabulation:

	Class of Supply						
	I	II and IV	III	V			
Corps Area	(Foodstuffs)	(Clothing and Equipment)	(POL)	(Ammuni- tion)			
I III IV	26 12 38 <u>a</u> /	35 15 40 18	Negl. Negl. Negl.	16 10 14 4			

a. The Communists have no external requirements for foodstuffs in the IV Corps area, the rich rice-growing area of South Vietnam.

12. Daily supply losses in 1968 represent only a small fraction of the estimated volume of supplies moving through Laos and available to Communist forces in South Vietnam. The external requirement to offset daily losses, including losses of foodstuffs, would increase by 22 tons a day, the equivalent of seven trucks a day, or about 10 percent of the average daily tonnage delivered to southern Laos during the first half of 1968. This is not a significant addition to the capabilities of the Communist logistics system. The major impact of these losses, in terms of logistics activity, is undoubtedly in the added burden imposed on the distribution and supply system within South Vietnam.

Impact on Combat Effectiveness - Evidence of Shortages

13. Despite the heavy losses of weapons that enemy forces suffered in 1967 and the even greater losses thus far in 1968, they have had no appreciable effect to date on overall Viet Cong or North Vietnamese combat effectiveness. In fact, there is no doubt that enemy combat forces in South Vietnam -- main, local, and guerrillas -- are better equipped today than ever before. During 1967 and in the period immediately before the Tet offensive, the Communists infiltrated large quantities of new and improved weapons into South Vietnam. These included large numbers of AK-47 assault rifles; 82-mm and 120-mm mortars; 107-mm, 122-mm, and 140-mm rockets; and the RPG-7 antitank launcher.

- The comparatively low level of actions initiated recently by the Viet Cong or the North Vietnamese can be attributed in part to Allied success in uncovering and destroying enemy caches of essential war materiel. Destruction of such caches appears to have played an especially important role in restricting enemy attacks in the Saigon area. However, available intelligence does not support the conclusion that these losses have been the principal factor dictating enemy strategy. Interrogation reports and captured documents make little mention of weapons shortages, and the continued capture of largely new and serviceable arms indicates that Communist forces are resupplying weapons at a high rate. Of the total number of small arms captured in 1967, only about 10 percent of the weapons were of the new family of Soviet and Chinese semiautomatic carbines (SKS) and assault rifles (AK-47). The remainder were a conglomeration of French bolt-action rifles, German Mausers, US rifles and carbines, and Soviet bolt-action carbines. About 90 percent of recently captured weapons were modern and of the type needed by the enemy.
- There have been some indications in recent months that ammunition shortages have acted as a constraint on Viet Cong and North Vietnamese initiative in certain areas. Shortages are most frequently reported in the I Corps area, the one in which the greatest volume of enemy ammunition expenditures and ammunition losses has been taking place. Again, however, the shortages of ammunition appear to be more related to forward distribution problems than to the destruction by Allied forces of enemy caches. It is doubtful, moreover, that the enemy would have introduced the new family of weapons into South Vietnam on such a widespread basis if the Communists had anticipated any ammunition resupply problems. Finally, the number of captured documents and interrogation reports indicating that both weapons and ammunition are available in sufficient quantities has been greater than the number of reports of weapons and ammunition shortages.
- 16. Although Allied forces are destroying much less food than formerly, it appears that the enemy is confronted with increasing difficulties in supplying

food to his combat forces, especially in the I and III Corps areas. Captured documents and interrogation reports are replete with examples of insufficient rations and resulting poor morale. However, the shortages appear very uneven. North Vietnamese units separated by only a few kilometers at Khe Sanh had widely contrasting experiences with respect to the availability of rations and other supplies. Allied interdiction efforts have undoubtedly contributed to food shortages, but analysis of captured documents and interrogation reports indicates that forward distribution problems have probably been the more important factor. Reports of food shortages continue at a high level this year despite a substantial reduction in the amount of food captured and destroyed by Allied forces, suggesting distribution bottlenecks as the principal cause of local food shortages.

17. Shortages of medical supplies experienced by both Viet Cong and North Vietnamese forces are evident in all areas of South Vietnam, except the IV Corps area, and are especially acute in the III Corps area. There is, however, little evidence that Allied destruction of enemy caches has been a major factor in causing these shortages. There have been some reports of other shortages of Class II and Class IV supplies, specifically some deficiencies in the resupply of quartermaster items in the I Corps area. However, none of these shortages are seriously impairing the combat readiness of Communist forces.

Table 1

Viet Cong and North Vietnamese Supply Losses
in South Vietnam As a Result of Allied Ground Forces
1967 - June 1968

Category		1967	1968 (1 January - 29 June)			
Α.	Weapons		Units			
	Individual	28,614	31,171			
	Crew-served	2,933	6,659	. •		
	Rockets		966			
В.	Ammunition					
	Small arms	2,327,341	1,912,456			
	Mortars	22,418	23,648			
	Mines	12,776	4,063			
•	Grenades	65,980	23,092			
C.	Foodstuffs					
			Tons			
	Rice	13,779	2,841			
	Salt	162	30			

Table 2

Viet Cong and North Vietnamese Supply Losses
as a Percent of External Requirements, by Corps Area

				S	hort Tons	s Per Day					- D-usont
	External Requirements Supply Losses									Losses as a Percent of External	
Corps Area	I	II and IV	III	V		I	II and IV	III	V		Requirements
	(Food)	(Clothing and Equipment)	(POL)	(Ammunition)	Total	(Food)	(Clothing and Equipment)	(POL)	(Ammunition)	Total	
I	25.0	4.25	Negl.	10.60	39.85	6.56	1.50	Negl.	1.71	9.77	25
II	18.0	2.83	Negl.	2.75	23.58	2.21	0.42	Negl.	0.28	2.91	12
		-	Negl.	4.80	24.51	6.54	1.09	Negl.	0.66	8.29	3 ¹ +
III	17.0	2.71	_	2.45	4.40	0.29	0.37	Negl.	0.10	0.76	17
IA		2.01	Negl.	<•47	4.40	3.27	- 31	J		01 72	214
Total					92.40					21.73	-1

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